#### SEQUENCE LISTING

	SPAGRACE HTSITUG	
<110>	Amit, Ido Yakir , Liat Yarden, Yosef	
<120>	POLYNUCLEOTIDES, POLYPEPTIDES AND ANTIBODIES AND USE THEREOF INTERATING TSG101-ASSOCIATED DISEASES	Ŋ
<130>	28186	
<160>	53	
<170>	PatentIn version 3.2	
<210> <211> <212> <213>	1 2893 DNA Homo sapiens	
<400> ggcacg	1 agga tcaggaaggg ggtgcaagag ggttagtgat tggggagcag aaggggtcct	60
	Tact changeses ages goods and the sail	120
	The congress of the same but the	180
	CCC2 Catatataaa tatamaatata aa	240
gcaaag	tct gcagaagaag gtgctgatcg tccacacgaa tcacctcact tccctgcttc	300
ccaaat	cetg cageeteetg agtetggeaa ceattaaggt tetagatete caegataate	360
agctga	cago cottoctgao gatotggggo agotgaotgo cotocaggto ttaaacgtgg 4	120
aaagga	atca actgatgcag ctcccacgtt ccattgggaa cctgacccag ctccagactc 4	180
tcaatg	taa agacaacaag ctgaaggagc ttccagacac cgtgggggag cttcgaagcc	40
tgcgta	cet caacateagt ggaaacgaga tecagagatt geegeagatg etggeteaeg	500
ttcgaa	cct ggagatgctg agccttgacg cctcggccat ggtctacccg ccgcgggagg	560
tgtgtg	rtgc cggcactgcg gccatcttgc agttcctctg caaagagtca gggctggaat 7	720
actacc	ccc ttctcagtac ttgctgccaa ttctggagca agatggaatc gagaactctc 7	780
gggaca	rccc tgatgggccc acggacagat tctcaaggga ggagttagag tggcagaaca 8	340
ggttct	aga ctatgagaag aggaaggaac agaagatgct ggagaaactc gagtttgaac g	900
ggcgcc	gga actggggcag cgggagcaca cccagctcct tcagcagagc agcagccaga	960
	· · · · · · · · · · · · · · · · · · ·	20
		080
		40
	•	00
	,	60
		20
		80
	· · · ·	40
	-	00
		60
ggaagt	cct ggacacagag tcactccagg agatgatctc ggagcagcgc tgggccctca 16	20

geteectget	ccagcagctg	ctcaaagaga	agcagcagcg	agaggaagag	ctccgggaaa	1680
tcctgacgga	gttagaagcc	aaaagtgaaa	ccaggcagga	aaattactgg	ctgattcagt	1740
atcaacggct	tttgaaccag	aagcccttgt	ccttgaagct	gcaagaagag	gggatggagc	1800
gccagctggt	ggccctcctg	gaggagctgt	cggctgagca	ctacctgccc	atctttgcgc	1860
accaccgcct	ctcactggac	ctgctgagcc	aaatgagccc	aggggacctg	gccaaggtgg	1920
gcgtctcaga	agctggcctg	cagcacgaga	tcctccggag	agtccaggaa	ctgctggatg	1980
cagccaggat	ccagccagag	ctgaaaccac	caatgggtga	ggtcgtcacc	cctacggccc	2040
cccaggagcc	tcctgagtct	gtgaggccat	ccgctccccc	tgcagagetg	gaggtgcagg	2100
cctcagagtg	tgtcgtgtgc	ctggaacggg	aggcccagat	gatetteete	aactgtggcc	2160
acgtctgctg	ctgccagcag	tgctgccagc	cactgcgcac	ctgcccgctg	tgccgccagg	2220
acategecca	gcgcctccgc	atctaccaca	gcagctgagt	gctgcccgcc	cacctgggcc	2280
tggtcctagc	cctgcctcgg	ccactgtgag	ccccgggctc	ctgctcagcc	ttgtgccagc	2340
cagactcgta	tgaggetece	ccctgccctg	ggcccettcc	ccactgccca	ggagccccca	2400
tcctaagctc	caagcatgtc	tgggccaggc	agaggtgctc	ctcatccatg	acaccaccag	2460
tctgaatggt	cctgggggct	ggggctggag	aggccgctgc	accaccaccc	gagcctggga	2520
gccagcgtcc	cagcctaatc	acggatctgc	tgcctcccag	ctgtcttgac	tgaaggccac	2580
cgcccctgca	ggagettggg	tcctcatctg	ggggccatgc	acaggcccgt	cccaccctgc	2640
atgtgggaag	ggagcaggag	ggcctggctg	ggtgagggga	ggccttcctg	ggaaggcgtg	2700
tggtgcaggc	ctgtgctcac	agtggcacca	gcaaccctgg	gtetecetet	ctgctgctcc	2760
ccagaacccc	ggggaaataa	tgctctccac	aactgtccct	ccttacccca	tgtagctcga	2820
tccgaagcag	gagtgtcaat	aaacctgtct	tcagtgcgaa	aaaaaaaaa	aaaaaaaaa	2880
aaaaaaaaa	aaa					2893

<210> 2 <211> 723 <212> PRT <213> Homo sapiens

<400> 2

Met Pro Leu Phe Phe Arg Lys Arg Lys Pro Ser Glu Glu Ala Arg Lys 10

Ile Leu Asp Ile Ser Lys Cys Glu Leu Ser Glu Ile Pro Phe Gly Ala

Phe Ala Thr Cys Lys Val Leu Gln Lys Lys Val Leu Ile Val His Thr 50 55 60

Asn His Leu Thr Ser Leu Leu Pro Lys Ser Cys Ser Leu Leu Ser Leu 70

Ala Thr Ile Lys Val Leu Asp Leu His Asp Asn Gln Leu Thr Ala Leu 85

### WO 2005/019407 PCT/IL2004/000760 3/20

- Pro Asp Asp Leu Gly Gln Leu Thr Ala Leu Gln Val Leu Asn Val Glu 100 105 105 110 110 Arg Asn Gln Leu Met Gln Leu Pro Arg Ser Ile Gly Asn Leu Thr Gln
- Leu Gln Thr Leu Asn Val Lys Asp Asn Lys Leu Lys Glu Leu Pro Asp 130 135 140
- Thr Val Gly Glu Leu Arg Ser Leu Arg Thr Leu Asn Ile Ser Gly Asn 145 150 155 160
- Glu Ile Gln Arg Leu Pro Gln Met Leu Ala His Val Arg Thr Leu Glu 165 170 175
- Met Leu Ser Leu Asp Ala Ser Ala Met Val Tyr Pro Pro Arg Glu Val 180 . 190
- Cys Gly Ala Gly Thr Ala Ala Ile Leu Gln Phe Leu Cys Lys Glu Ser 195 200 205
- Gly Leu Glu Tyr Tyr Pro Pro Ser Gln Tyr Leu Leu Pro Ile Leu Glu 210 215 220
- Gln Asp Gly Ile Glu Asn Ser Arg Asp Ser Pro Asp Gly Pro Thr Asp 225 230 235 240
- Arg Phe Ser Arg Glu Glu Leu Glu Trp Gln Asn Arg Phe Ser Asp Tyr 245 250 255
- Glu Lys Arg Lys Glu Gln Lys Met Leu Glu Lys Leu Glu Phe Glu Arg 260 265 270
- Arg Leu Glu Leu Gly Gln Arg Glu His Thr Gln Leu Leu Gln Gln Ser 275 280 285
- Ser Ser Gln Lys Asp Glu Ile Leu Gln Thr Val Lys Glu Glu Gln Ser 290 295 300
- Arg Leu Glu Gln Gly Leu Ser Glu His Gln Arg His Leu Asp Ala Glu 305 310 315 320
- Arg Gln Arg Leu Gln Glu Gln Leu Lys Gln Thr Glu Gln Asn Ile Ser 325 330 335
- Ser Arg Ile Gln Lys Leu Leu Gln Asp Asn Gln Arg Gln Lys Lys Ser 340 345 350
- Ser Glu Ile Leu Lys Ser Leu Glu Asn Glu Arg Ile Arg Met Glu Gln 355 360 365
- Leu Met Ser Ile Thr Glu Glu Glu Thr Glu Ser Leu Arg Arg Arg Asp 370 375 380
- Val Ala Ser Ala Met Gln Gln Met Leu Thr Glu Ser Cys Lys Asn Arg 385 390 395 400

Leu Ile Gln Met Ala Tyr Glu Ser Gln Arg Gln Asn Leu Val Gln Gln 405 410 415

Ala Cys Ser Ser Met Ala Glu Met Asp Glu Arg Phe Gln Gln Ile Leu 420 425 430

Ser Trp Gln Gln Met Asp Gln Asn Lys Ala Ile Ser Gln Ile Leu Gln 435 440 445

Glu Ser Ala Met Gln Lys Ala Ala Phe Glu Ala Leu Gln Val Lys Lys 450 455 460

Asp Leu Met His Arg Gln Ile Arg Ser Gln Ile Lys Leu Ile Glu Thr 465 470 475 480

Glu Leu Leu Gln Leu Thr Gln Leu Glu Leu Lys Arg Lys Ser Leu Asp 485 490 495

Thr Glu Ser Leu Gln Glu Met Ile Ser Glu Gln Arg Trp Ala Leu Ser 500 505 510

Ser Leu Leu Gln Gln Leu Leu Lys Glu Lys Gln Gln Arg Glu Glu Glu 515 520 525

Leu Arg Glu Ile Leu Thr Glu Leu Glu Ala Lys Ser Glu Thr Arg Gln 530 540

Glu Asn Tyr Trp Leu Ile Gln Tyr Gln Arg Leu Leu Asn Gln Lys Pro 545 550 555 560

Leu Ser Leu Lys Leu Gln Glu Glu Gly Met Glu Arg Gln Leu Val Ala 565 570 575

Leu Leu Glu Glu Leu Ser Ala Glu His Tyr Leu Pro Ile Phe Ala His 580 585 590

His Arg Leu Ser Leu Asp Leu Leu Ser Gln Met Ser Pro Gly Asp Leu 595 600 605

Ala Lys Val Gly Val Ser Glu Ala Gly Leu Gln His Glu Ile Leu Arg 610 . 620

Arg Val Glu Leu Leu Asp Ala Ala Arg Ile Glu Pro Glu Leu Lys 625 630 630 635 640

Pro Pro Met Gly Glu Val Val Thr Pro Thr Ala Pro Gln Glu Pro Pro 645 650 655

Glu Ser Val Arg Pro Ser Ala Pro Pro Ala Glu Leu Glu Val Gln Ala
660 665 670

Ser Glu Cys Val Val Cys Leu Glu Arg Glu Ala Gln Met Ile Phe Leu 675 680 685

Asn Cys Gly His Val Cys Cys Cys Gln Gln Cys Cys Gln Pro Leu Arg

690 695 700

Thr Cys Pro Leu Cys Arg Gln Asp Ile Ala Gln Arg Leu Arg Ile Tyr 705 710 715 720

His Ser Ser

<210> 3 <211> 2044 <212> DNA <213> Mus musculus

<400> 3

cttggtttct	agaatctcga	gactttgtca	tcctgagttg	cgtgtctttc	tgaaatttaa	60
agtttcggtg	ctcacttcta	tgtttgaagg	agaccggaca	ccagctcagc	ttttgggggc	120
caatggtttg	tatctgtggc	caagtcttcg	gagtgactgg	cctaccttga	ggtccaccca	180
agaatcggaa	catcggtgga	ggacctcccc	atccacagag	ccagggtcca	gaagagctca	240
caccggagga	tgcccctctt	ctttcggaag	cggaaaccca	gtgaggaggc	tcgaaaacgc	300
ctggagtacc	agatgtgtct	ggcaaaagaa	gctggggcag	atgacattct	cgacatctct	360
aaatgtgagc	tctctgagat	tccatttggg	gcttttgcaa	cgtgcaaagt	tctacagaaa	420
aaggtgttga	ttgtccatac	aaaccacctc	acctccctgc	ttcccaagtc	ctgcagcctc	480
ttgagccttg	tcaccatcaa	ggttctggat	ctccatgaga	accagetgae	agcccttcct	540
gatgacatgg	ggcagctgac	agtcctgcag	gtattgaatg	tggaaagaaa	tcaactcacg	600
catctccctc	gctctattgg	gaacctgctg	cagctccaga	cgctcaatgt	aaaagacaac	660
aagctgaagg	agcttcctga	·caccetgggg	gagctgcgga	gcctgcggac	actcgacatt	720
agtgagaacg	agattcagag	acttccccag	atgctggcgc	acgtgcggac	cctggagacg	780
ctgagcctca	acgccttggc	aatggtctac	ccccaccag	aggtgtgtgg	cgctggcact	840
gcggccgtgc	agcagttcct	ctgcaaagag	tcaggactgg	actattaccc	accttctcag	900
tacctgctgc	cagtcctgga	gcaagatgga	gcagagaaca	cccaagacag	ccccgatgga	960
cccgcaagcc	gattctccag	ggaggaggct	gaatggcaga	atcggttctc	cgactacgag	1020
aagcggaagg	agcagaagat	gctggagaag	ctggagttcg	agcggcgcct	ggaccttggg	1080
cagcgggagc	acgctgagct	actgcagcag	agccacagcc	acaaggacga	gatectgeag	1140
acggtcaagc	aggagcagac	acggctagag	caggacctga	gcgagcgcca	gcgctgtctg	1200
gatgcagagc	ggcagcagct	gcaggagcag	ctcaagcaga	cggagcagag	catcgccage	1260
cgcattcaga	gactcctgca	ggacaaccag	aggcaaaaga	agagttctga	gattetgaaa	1320
tcgctggaga	atgagagaat	aagaatggag	cagttgatgt	ccatcaccca	ggaggagaca	1380
gagaacctca	ggcagcgtga	gategeegee	gccatgcagc	agatgctgac	ggagagctgt	1440
aagagccggc	tcatccagat	ggcctatgag	tctcagaggc	agagcctggc	gcagcaggcc	1500
tgttccagca	tggctgaaat	ggacaagcgg	ttccagcaga	ttctgtcttg	gcagcagatg	1560
gatcagaaca	aagccatcag	ccagatcctt	caggagagtg	taatgcagaa	ggctgccttc	1620
gaggetetee	aggtgaagaa	ggacctgatg	catcggcaga	tcaggaacca	gattaggcta	1680
atagaaactg	agttactgca	gctgacacag	ctggagttaa	agaggaagtc	cctggacaca	1740

# WO 2005/019407 PCT/IL2004/000760 6/20

gagacgette aggagatggt eteagageag egetgggeae teageaacet getecageag	1800
ctcctgaaag agaagaagca gcgggaagag gaactccatg gcatcctggc ggaattagag	1860
gccaagagcg aaacgaagca ggaaaattac tggctcatcc agtaccaacg gcttttaaac	1920
cagaagcett tgtccttgaa actgcaggaa gaaggcatgg agcgacggct ggtggccctg	1980
ctggtggagc tttctgcaga gcactacctg cccctcttcg cccaccaccg catctcactg	2040
gaca	2044
<210> 4 <211> 116 <212> PRT <213> Mus musculus	
<400> 4	
Met Phe Glu Gly Asp Arg Thr Pro Ala Gln Leu Leu Gly Ala Asn Gly 1 10 15	
Leu Tyr Leu Trp Pro Ser Leu Arg Ser Asp Trp Pro Thr Leu Arg Ser 20 25 30	
Thr Gln Glu Ser Glu His Arg Trp Arg Thr Ser Pro Ser Thr Glu Pro 35 40 45	
Gly Ser Arg Arg Ala His Thr Gly Gly Cys Pro Ser Ser Phe Gly Ser 50 · 55 60	
Gly Asn Pro Val Arg Arg Leu Glu Asn Ala Trp Ser Thr Arg Cys Val 65 70 75 80	
Trp Gln Lys Lys Leu Gly Gln Met Thr Phe Ser Thr Ser Leu Asn Val 85 90 95	
Ser Ser Leu Arg Phe His Leu Gly Leu Leu Gln Arg Ala Lys Phe Tyr 100 105 110	
Arg Lys Arg Cys 115	
<210> 5 <211> 2971 <212> DNA <213> Rattus norvegicus	
<400> 5 ggtccagaag aactetegea ggaggatgee tetettett eggaagegga aaceeagtga	60
ggaagctcgg aaacgcctgg agtaccagat gtgtctggca aaagaagctg gggcagatga	120
catecttgac atetetaagt gegagettte egagatteca tttggggett ttgcaaegtg	180
caaagttcta cagaaaaagg tgttgattgt ccacacaaac catctcacct ccctgctgcc	240
caagtcctgc agcctcttga gcctcgccac catcaaggtt ctggatctcc atgacaacca	300
gctgacagcc cttcctgacg atattgggca gctgacagcc ctgcaggtat tgaatgtaga	360
aaggaatcaa ctgacacacc teecaegete tgttgggaac etgetgeage teeagaeeet	420
caacgtaaaa ggtggggaca caagccctgt gcacgttacc ctcaggcaac tccagagtca	480
ggccaccgag tgtgagggtg acggatcagt ctgtctccat ggcaaccaga agcagtatgt	540

ctatgagccc	gagagtcaga	gacttgtggg	gcagaagaca	gacagacaga	ccatcacagt	600
gacagaacga	gacaacaagc	taaaggagct	tccggacace	ctgggggagc	tgcggagcct	660
gcgtaccctc	gacatcagtg	aaaatgagat	ccagagactt	ccccagatgc	tggctcatgt	720
gcggaccctg	gagatggttc	tgaacaaccc	tgtggctgtc	acctctgcaa	agcttagtat	780
ttgtcacagt	ggtaacaacc	tggccgagca	tcccagtccc	cgctccccct	gcttttgtga	840
atcacccctg	tcaagccaga	ctgaggagca	gcagtgtctg	gggaagtggc	agacgctgag	900
cctcgatgcc	ttgtcaatgg	tctaccccc	accagaggtg	tgtggcgctg	gcactgcggc	960
cgtgcagcag	ttcctctgca	aagagtcagg	cctggactat	tacccacctt	ctcagtacct	1020
gctgccagtc	ctggagcaag	atggagccga	gaactcccag	gacagccctg	atggacccac	1080
acgcagattc	tccagggagg	aggctgaatg	gcagaatcgg	ttctccgact	acgagaagcg	1140
aaaggagcag	aagatgctgg	agaagctgga	gttcgagcgg	cgcctggacc	tcgggcagcg	1200
ggagcatgct	gagetgetee	agcagagcca	cagccacaag	gacgagatcc	tgcagacggt	1260
caagcaggag	cagacacggc	tcgagcaggg	cctgagtgag	cgccagcgct	gcctggatgc	1320
agaacggcag	cágctgcagg	agcagctcaa	gcagtcggag	cagagcattg	ccagccgcat	1380
ccagagactc	ctgcaggaca	atcagaggca	aaagaagagt	tctgagattc	tgaaatcact	1440
ggagaatgag	agaatacgaa	tggagcagct	gatgtccatt	acccaggagg	agaccgagaa	1500
cctcaggcag	cgtgagatcg	ccgccgccat	gcagcagatg	ctgaccgaga	gctgtaagag	1560
ccggctcatc	cagatggcct	atgagtccca	gaggcagagc	ctggtgcagc	aggcctgttc	1620
cagcatggct	gaaatggaca	agcggttcca	gcagattctg	tcatggcagc	agatggacca	1680
gaacaaagcc	atcagccaga	tccttcagga	ggctcgaatg	ctgcttgcag	ttgattacaa	1740
acacgcgatg	tgtccagtcc	tgtctttgct	gaaggctgtt	tcttacaggc	aacagcagct	1800
gaatcccatc	cattttcgtt	tagatgtgga	gttgaggacc	caggactgga	ggcccctctt	1860
tgtccttctg	tccctggtgt	ttggggctgt	cctcgtccca	cctgtggttt	cgggtgctct	1920
teteegtett	cagaatgcca	gtcacctggc	tgtttgcagt	cagcgtcatg	tggatgtgtc	1980
agatgagcgt	ctgacctcag	aacctccgtt	gttcatcctc	agtgtgatgc	agaaggctgc	2040
attcgaggct	ctccaggtaa	agaaagacct	cacgcatcgg	cagatcagga	gccagattag	2100
gctaatagaa	actgagttac	tgcagctgac	acagctggag	ttaaagagga	agtccctgga	2160
cacagagacg	cttcagggcg	getgeteete	agctccagac	acaggettet	ccggcacaca	2220
gagagccggc	ccagccccag	tagaacagat	gtggtccatg	ggcaaaggta	gctctgtgca	2280
gggcgagagg	gagatggtct	cagagcagcg	ctgggcgctc	agcaacctgc	tccagcagct	2340
cctcaaagag	aagaagcagc	gggaagagga	gctccatggc	atcctggcgg	aattagaggc	2400
caagagtgaa	acgaagcagg	aaaattactg	gctcatccag	taccaacggc	ttttgaacca	2460
gaagcctttg	tccttgaagc	tgcaggaaga	aggcatggag	cggcagctgg	tggccctgct	2520
ggtggagctg	tctgctgagc	actacctgcc	cctcttcgcc	caccaccgca	tcacactgga	2580
catgctgagc	cggatgggtc	ctggagatct	ggctaaggtg	ggtgtctcag	aagcaggcct	2640
gcaacatgaa	atcctgcgaa	gagcccggga	cctgctggat	gtggccaggg	tccaaccaga	2700
gttgaaacca	cccaagaatg	aggtctttgg	tgtctctgag	cccccacag	cccctcagga	2760

getteetgag teegtgagae eatetgeece geeagetgaa etggaegtge egaceteaga 2820 gtgtgttgttg tgeetggaae gtgaggeeca gatggtette eteacetgeg geeatgtetg 2880 etgetgeeag eagtgetgee ageegetgeg eacetgeeca etgtgeegee aggagatete 2940 ecagegeete eggatetace acageagetg a 2971

<210> 6

<211> 981

<212> PRT

<213> Rattus norvegicus

<400> 6

Met Pro Leu Phe Phe Arg Lys Arg Lys Pro Ser Glu Glu Ala Arg Lys

1 10 15

Arg Leu Glu Tyr Gln Met Cys Leu Ala Lys Glu Ala Gly Ala Asp Asp 20 25 30

Ile Leu Asp Ile Ser Lys Cys Glu Leu Ser Glu Ile Pro Phe Gly Ala 35 40 45

Phe Ala Thr Cys Lys Val Leu Gln Lys Lys Val Leu Ile Val His Thr 50 55 60

Asn His Leu Thr Ser Leu Leu Pro Lys Ser Cys Ser Leu Leu Ser Leu 65 70 75 80

Ala Thr Ile Lys Val Leu Asp Leu His Asp Asn Gln Leu Thr Ala Leu 85 90 95

Pro Asp Asp Ile Gly Gln Leu Thr Ala Leu Gln Val Leu Asn Val Glu
100 105 110

Arg Asn Gln Leu Thr His Leu Pro Arg Ser Val Gly Asn Leu Leu Gln 115 120 125

Leu Gln Thr Leu Asn Val Lys Gly Gly Asp Thr Ser Pro Val His Val 130 135 140

Thr Leu Arg Gln Leu Gln Ser Gln Ala Thr Glu Cys Glu Gly Asp Gly 145 150 155 160

Ser Val Cys Leu His Gly Asn Gln Lys Gln Tyr Val Tyr Glu Pro Glu 165 170 175

Ser Gln Arg Leu Val Gly Gln Lys Thr Asp Arg Gln Thr Ile Thr Val 180 185 . 190

Thr Glu Arg Asp Asn Lys Leu Lys Glu Leu Pro Asp Thr Leu Gly Glu 195 200 205

Leu Arg Ser Leu Arg Thr Leu Asp Ile Ser Glu Asn Glu Ile Gln Arg 210 215 220

Leu Pro Gln Met Leu Ala His Val Arg Thr Leu Glu Met Val Leu Asn 225 230 235 240 Asn Pro Val Ala Val Thr Ser Ala Lys Leu Ser Ile Cys His Ser Gly 245 250 255

Asn Asn Leu Ala Glu His Pro Ser Pro Arg Ser Pro Cys Phe Cys Glu 260 265 270

Ser Pro Leu Ser Ser Gln Thr Glu Glu Gln Gln Cys Leu Gly Lys Trp 275 280 285

Gln Thr Leu Ser Leu Asp Ala Leu Ser Met Val Tyr Pro Pro Glu 290 295 300

Val Cys Gly Ala Gly Thr Ala Ala Val Gln Gln Phe Leu Cys Lys Glu 305 310 315 320

Ser Gly Leu Asp Tyr Tyr Pro Pro Ser Gln Tyr Leu Leu Pro Val Leu 325 330 335

Glu Gln Asp Gly Ala Glu Asn Ser Gln Asp Ser Pro Asp Gly Pro Thr 340 345 350

Arg Arg Phe Ser Arg Glu Glu Ala Glu Trp Gln Asn Arg Phe Ser Asp 355 360 365

Tyr Glu Lys Arg Lys Glu Gln Lys Met Leu Glu Lys Leu Glu Phe Glu 370 375 380

Arg Arg Leu Asp Leu Gly Gln Arg Glu His Ala Glu Leu Leu Gln Gln 385 390 395 400

Ser His Ser His Lys Asp Glu Ile Leu Gln Thr Val Lys Gln Glu Gln 405 410 415

Thr Arg Leu Glu Gln Gly Leu Ser Glu Arg Gln Arg Cys Leu Asp Ala
420 425 430

Glu Arg Gln Glu Leu Gln Glu Gln Leu Lys Gln Ser Glu Gln Ser Ile 435 · 440 445

Ala Ser Arg Ile Gln Arg Leu Leu Gln Asp Asn Gln Arg Gln Lys Lys 450 455 460

Ser Ser Glu Ile Leu Lys Ser Leu Glu Asn Glu Arg Ile Arg Met Glu 465 470 475 480

Gln Leu Met Ser Ile Thr Gln Glu Glu Thr Glu Asn Leu Arg Gln Arg 485 490 495

Glu Ile Ala Ala Met Gln Gln Met Leu Thr Glu Ser Cys Lys Ser 500 505 510

Arg Leu Ile Gln Met Ala Tyr Glu Ser Gln Arg Gln Ser Leu Val Gln 515 520 525

Gln Ala Cys Ser Ser Met Ala Glu Met Asp Lys Arg Phe Gln Gln Ile 530 535 540

## WO 2005/019407 PCT/IL2004/000760

- Leu Ser Trp Gln Gln Met Asp Gln Asn Lys Ala Ile Ser Gln Ile Leu 545 550 550 560 Cln Glu Ala Arg Met Leu Leu Ala Val Asp Tyr Lys His Ala Met Cys
- Pro Val Leu Ser Leu Leu Lys Ala Val Ser Tyr Arg Gln Gln Gln Leu 580 585 590
- Asn Pro Ile His Phe Arg Leu Asp Val Glu Leu Arg Thr Gln Asp Trp 595 600 605
- Arg Pro Leu Phe Val Leu Leu Ser Leu Val Phe Gly Ala Val Leu Val 610 615 620
- Pro Pro Val Val Ser Gly Ala Leu Leu Arg Leu Gln Asn Ala Ser His 625 630 635 640
- Leu Ala Val Cys Ser Gln Arg His Val Asp Val Ser Asp Glu Arg Leu 645 650 655
- Thr Ser Glu Pro Pro Leu Phe Ile Leu Ser Val Met Gln Lys Ala Ala 660 . 665 670
- Phe Glu Ala Leu Gln Val Lys Lys Asp Leu Thr His Arg Gln Ile Arg 675 680 685
- Ser Gln Ile Arg Leu Ile Glu Thr Glu Leu Leu Gln Leu Thr Gln Leu 690 695 700
- Glu Leu Lys Arg Lys Ser Leu Asp Thr Glu Thr Leu Gln Gly Gly Cys 705 710 715 720
- Ser Ser Ala Pro Asp Thr Gly Phe Ser Gly Thr Gln Arg Ala Gly Pro
  725 730 735
- Ala Pro Val Glu Gln Met Trp Ser Met Gly Lys Gly Ser Ser Val Gln 740 745 750
- Gly Glu Arg Glu Met Val Ser Glu Gln Arg Trp Ala Leu Ser Asn Leu 755 760 765
- Leu Gln Gln Leu Leu Lys Glu Lys Lys Gln Arg Glu Glu Glu Leu His
  770 780
- Gly Ile Leu Ala Glu Leu Glu Ala Lys Ser Glu Thr Lys Gln Glu Asn 785 790 795 800
- Tyr Trp Leu Ile Gln Tyr Gln Arg Leu Leu Asn Gln Lys Pro Leu Ser 805 810 815
- Leu Lys Leu Gln Glu Glu Gly Met Glu Arg Gln Leu Val Ala Leu Leu 820 825 830
- Val Glu Leu Ser Ala Glu His Tyr Leu Pro Leu Phe Ala His His Arg

845

840

Ile Thr Leu Asp Met Leu Ser Arg Met Gly Pro Gly Asp Leu Ala Lys 850 855 860

Val Gly Val Ser Glu Ala Gly Leu Gln His Glu Ile Leu Arg Arg Ala 865 870 875 880

Arg Asp Leu Leu Asp Val Ala Arg Val Gln Pro Glu Leu Lys Pro Pro 885 890 895

Lys Asn Glu Val Phe Gly Val Ser Glu Pro Pro Thr Ala Pro Gln Glu 900 905 910

Leu Pro Glu Ser Val Arg Pro Ser Ala Pro Pro Ala Glu Leu Asp Val 915 920 925

Pro Thr Ser Glu Cys Val Val Cys Leu Glu Arg Glu Ala Gln Met Val 930 935 940

Phe Leu Thr Cys Gly His Val Cys Cys Cys Gln Gln Cys Cys Gln Pro 945 950 955 960

Leu Arg Thr Cys Pro Leu Cys Arg Gln Glu Ile Ser Gln Arg Leu Arg 965 970 975

Ile Tyr His Ser Ser 980

835

<210> 7

<211> 234

<212> PRT <213> Homo sapiens

<220>

<221> misc\_feature

<223> Active portion of human Tal

<400> 7

Leu Lys Arg Lys Ser Leu Asp Thr Glu Ser Leu Gln Glu Met Ile Ser 1 5 10 15

Glu Gln Arg Trp Ala Leu Ser Ser Leu Leu Gln Gln Leu Leu Lys Glu
20 25 30

Lys Gln Gln Arg Glu Glu Glu Leu Arg Glu Ile Leu Thr Glu Leu Glu 35 40 45

Ala Lys Ser Glu Thr Arg Gln Glu Asn Tyr Trp Leu Ile Gln Tyr Gln
50 55 60

Arg Leu Leu Asn Gln Lys Pro Leu Ser Leu Lys Leu Gln Glu Glu Gly 65 70 75 80

Met Glu Arg Gln Leu Val Ala Leu Leu Glu Glu Leu Ser Ala Glu His

#### WO 2005/019407 PCT/IL2004/000760 12/20

Tyr Leu Pro Ile Phe Ala His His Arg Leu Ser Leu Asp Leu Leu Ser

Gln Met Ser Pro Gly Asp Leu Ala Lys Val Gly Val Ser Glu Ala Gly 120

Leu Gln His Glu Ile Leu Arg Arg Val Gln Glu Leu Leu Asp Ala Ala

Arg Ile Gln Pro Glu Leu Lys Pro Pro Met Gly Glu Val Val Thr Pro

Thr Ala Pro Gln Glu Pro Pro Glu Ser Val Arg Pro Ser Ala Pro Pro

Ala Glu Leu Glu Val Gln Ala Ser Glu Cys Val Val Cys Leu Glu Arg 185

Glu Ala Gln Met Ile Phe Leu Asn Cys Gly His Val Cys Cys Cys Gln 200

Gln Cys Cys Gln Pro Leu Arg Thr Cys Pro Leu Cys Arg Gln Asp Ile

Ala Gln Arg Leu Arg Ile Tyr His Ser Ser 230

<210> 8

<211> 77 <212> PRT

<213> Homo sapiens

<220>

<221> misc\_feature

<223> Active portion of human Tal

<400> 8

Val Thr Pro Thr Ala Pro Gln Glu Pro Pro Glu Ser Val Arg Pro Ser

Ala Pro Pro Ala Glu Leu Glu Val Gln Ala Ser Glu Cys Val Val Cys

Leu Glu Arg Glu Ala Gln Met Ile Phe Leu Asn Cys Gly His Val Cys

Cys Cys Gln Gln Cys Cys Gln Pro Leu Arg Thr Cys Pro Leu Cys Arg

Gln Asp Ile Ala Gln Arg Leu Arg Ile Tyr His Ser Ser 65 70 75

<210> 9

<211> 25

<212> DNA <213> Artificial sequence

<220>

<223> Single strand DNA oligonucleotide

ggaatt	cgtc atggcggtgt cggag	25
<210>	10	
<211>		
<212>		
<213>	Artificial sequence	
<220>	-	
<223>	Single strand DNA oligonucleotide	
<400>	10	
cctcga	gtca gtagaggtca ctgagaccg	29
<210>	11	
<211>		
<212>	_·	
	Artificial sequence	
	•	
<220>		
<223>	Single strand DNA oligonucleotide	
<400>	11 .	
ggaatt	cggg cttattcagg tcatgattg	29
<210>	10	
<211>		
<212>		
	Artificial sequence	
<220>		
<223>	Single strand DNA oligonucleotide	
<400>	12	
	catt cccacagete cetta	25
		25
<210>	13	
<211>	35	
<212>		
<213>	Artificial sequence	
<220>		
<223>	Single strand DNA oligonucleotide	
<400>	13	
aaactg	cagc cagagcagaa ctgagttott catco	35
<210>	14	
<211>	27	
<212>	DNA	
<213>	Artificial sequence	
<220>		
<223>	Single strand DNA oligonucleotide	
<400>	14	
aaactg	cagg gcacgatcca tttcctc	27
<210>	15	
<211>	19	
<212>	DNA	
<213>	Artificial sequence	
<220>		
<223>	Single strand DNA oligonucleotide	
<400>	15	
cctgcag	gagc tggaggtgc	19

14/20

<210>	16	
<211>	20	
<212>		
<b>\Z13&gt;</b>	Artificial sequence	
<220>		
<223>	Single strand DNA oligonucleotide	
<400>	16	
gacgac	ctca cccattggtg	20
<210>	17	
<211>		
<212>		
<213>	Artificial sequence	
	• 1 1 1	
<220>		
<223>	Single strand DNA oligonucleotide	
<400>	17	
gcacgc	atta cetetataag geae	24
<210>	18	
<211>		
<212>		
<213>	Artificial sequence	
<220>		
<223>	Single should but allowed to	
~2237	Single strand DNA oligonucleotide	
<400>	18	
gggctta	attc aggtcatgat tgt	23
	335565	23
<210>		
<211>	23	
<212>	DNA	
	Artificial sequence	
~2137	Writigrat seducine	
	•	
<220>		
<223>	Single strand DNA oligonucleotide	
<400>	19	
	•	
cacaat	catg acctgaataa gcc	23
<210>	20	
<211>		
<212>		
<213>	Artificial sequence	
	·	
<220>		
	Circle street DVP -31	
<223>	Single strand DNA oligonucleotide	
<400>	20 ·	
gaggaga	acca teegageete	20
5-35-4		20
<210>	21	
<211>	20	
<212>	DNA	
<213>	Artificial sequence	
_		
<220>		
<223>	Single strand DNA oligonucleotide	
	2	
-400-	21	
<400>	21	
gagget	ogga tggtgteete	20
		-
<210>		
~~~~	22	

<211><212>		
	22	
<213>	Artificial sequence	
<220>		
<223>	Single strand DNA oligonucleotide	
<400>	22	
	caca getecettat ac	
	getetetat ac	2:
<210>	23	
<211>		
<212>		
<213>	Artificial sequence	
<220>	•	
	Single strand DNA oligonucleotide	
	ornate actuald DNA origonucleotide	
-400-	22	
<400>		
gtataa	ggga gctgtgggaa tg	22
<210>	24	
<211>	21	
<212>	DNA	
	Artificial sequence	
72202	-morrier seducine	
<220>		
	et a s	
<223>	Single strand DNA oligonucleotide	
<400>	24	
ggaggt	ggag actacaagga c	21
		4.1
<210>	25	
<211>		
<212>		
<b>\213&gt;</b>	Artificial sequence	
<220>	_	
<223>	Single strand DNA oligonucleotide	
	·	
<400>	25	
ccggga	tcca tggcggtgtc ggag	
•		24
		24
	·	24
<210>	26	24
<210> <211>	26 37	24
<210> <211> <212>	26 37 DNA	24
<210> <211> <212>	26 37	24
<210> <211> <212>	26 37 DNA	24
<210> <211> <212> <213> <220>	26 37 DNA Artificial sequence	24
<210> <211> <212> <213> <220>	26 37 DNA Artificial sequence	24
<210> <211> <212> <213> <220>	26 37 DNA	24
<210> <211> <212> <213> <223>	26 37 DNA Artificial sequence Single strand DNA oligonucleotide	24
<210><211><211><212><213><223><400>	26 37 DNA Artificial sequence Single strand DNA oligonucleotide	24
<210><211><211><212><213><223><400>	26 37 DNA Artificial sequence Single strand DNA oligonucleotide	24 37
<210> <211> <211> <212> <213> <223> <400> atagtt	26 37 DNA Artificial sequence Single strand DNA oligonucleotide	
<210> <211> <212> <213> <220> <223> <400> atagtt	26 37 DNA Artificial sequence Single strand DNA oligonucleotide 26 tagc ggccgctagt cacttgtcat cgtcgtc	
<210> <211> <212> <213> <223> <223> <400> atagtt	26 37 DNA Artificial sequence  Single strand DNA oligonucleotide  26 tagc ggccgctagt cacttgtcat cgtcgtc	
<210> <211> <212> <213> <223> <400> atagtt  <210> <211>	26 37 DNA Artificial sequence  Single strand DNA oligonucleotide  26 tagc ggccgctagt cacttgtcat cgtcgtc	
<210> <211> <212> <213> <223> <400> atagtt:	26 37 DNA Artificial sequence  Single strand DNA oligonucleotide  26 tagc ggccgctagt cacttgtcat cgtcgtc  27 26 DNA	
<210> <211> <212> <213> <223> <400> atagtt:	26 37 DNA Artificial sequence  Single strand DNA oligonucleotide  26 tagc ggccgctagt cacttgtcat cgtcgtc  27 26 DNA	
<210> <211> <212> <213> <223> <400> atagtt:	26 37 DNA Artificial sequence  Single strand DNA oligonucleotide  26 tagc ggccgctagt cacttgtcat cgtcgtc	
<210> <211> <212> <213> <223> <400> atagtt  <210> <211> <211> <211>	26 37 DNA Artificial sequence  Single strand DNA oligonucleotide  26 tagc ggccgctagt cacttgtcat cgtcgtc  27 26 DNA	
<210> <211> <212> <213> <220> <223> <400> atagtt  <211> <211> <211> <212> <213>	26 37 DNA Artificial sequence  Single strand DNA oligonucleotide  26 tagc ggccgctagt cacttgtcat cgtcgtc  27 26 DNA Artificial sequence	
<210> <211> <212> <213> <223> <400> atagtt:	26 37 DNA Artificial sequence  Single strand DNA oligonucleotide  26 tagc ggccgctagt cacttgtcat cgtcgtc  27 26 DNA	
<210> <211> <212> <213> <223> <400> atagtt  <210> <211> <2210> <2213> <220> <223>	26 37 DNA Artificial sequence  Single strand DNA oligonucleotide  26 tagc ggccgctagt cacttgtcat cgtcgtc  27 26 DNA Artificial sequence  Single strand DNA oligonucleotide	
<210> <211> <212> <213> <223> <400> atagtt: <210> <211> <212> <213> <400> <400>	26 37 DNA Artificial sequence  Single strand DNA oligonucleotide  26 tage ggeegetagt cacttgteat egtegte  27 26 DNA Artificial sequence  Single strand DNA oligonucleotide	
<210> <211> <212> <213> <223> <400> atagtt: <210> <211> <212> <213> <400> <400>	26 37 DNA Artificial sequence  Single strand DNA oligonucleotide  26 tagc ggccgctagt cacttgtcat cgtcgtc  27 26 DNA Artificial sequence  Single strand DNA oligonucleotide	37
<210> <211> <212> <213> <223> <400> atagtt: <210> <211> <212> <213> <400> <400>	26 37 DNA Artificial sequence  Single strand DNA oligonucleotide  26 tage ggeegetagt cacttgteat egtegte  27 26 DNA Artificial sequence  Single strand DNA oligonucleotide	
<210> <211> <212> <213> <223> <400> atagtt: <210> <211> <212> <213> <400> <400>	26 37 DNA Artificial sequence  Single strand DNA oligonucleotide  26 tage ggeegetagt cacttgteat egtegte  27 26 DNA Artificial sequence  Single strand DNA oligonucleotide	37
<210> <211> <211> <212> <213> <220> <223> <400> atagtt  <210> <211> <211> <212> <213> <200> <213> <400> cccaage	26 37 DNA Artificial sequence  Single strand DNA oligonucleotide  26 tage ggeegetagt cacttgteat egtegte  27 26 DNA Artificial sequence  Single strand DNA oligonucleotide	37
<210> <211> <211> <212> <213> <223> <400> atagtt  <210> <211> <212> <213> <210> <212> <213> <210> <212> <213>	26 37 DNA Artificial sequence  Single strand DNA oligonucleotide  26 tagc ggccgctagt cacttgtcat cgtcgtc  27 26 DNA Artificial sequence  Single strand DNA oligonucleotide  27 cttg gaaggatgcc gctctt	37
<210> <211> <212> <213> <223> <400> atagtt: <210> <211> <212> <213> <400> <400>	26 37 DNA Artificial sequence  Single strand DNA oligonucleotide 26 tagc ggccgctagt cacttgtcat cgtcgtc  27 26 DNA Artificial sequence  Single strand DNA oligonucleotide 27 cttg gaaggatgcc gctctt	37

<220> <223>	Single strand DNA oligonucleotide	
<400> ggggta	28 Lecce teatcaggea taategggta cateataggg atagetgetg tggtagatge	60
	•	
g		61
<210>	29	
<211>	20	
<212>	DNA	
<213>	Artificial sequence	
<220>		
<223>	Single strand DNA oligonucleotide	
<400>	29	
	ttgc agcttcaagg	20
<210>	30	
<211>	18	
<212>	DNA	
<213>	Artificial sequence	
<220>		
<223>	Single strand DNA oligonucleotide	
<400>	30	
gccagg	atcc agccagag	18
	• • •	10
<210>	31	
<211>	29	
<212>	DNA	
<213>	Artificial sequence	
	.mcilicial seducuce	
<220>	•	
<223>	Single strand DNA oligonucleotide	
<400>	31	
	ctgt ggcgccgtct gctgctgcc	
	- var agogeoguee geogeoge	29
<210>	32	
(211>	29.	
:212>	DNA	
:213>	Artificial sequence	
:220>		
:223>	Single strand DNA oligonucleotide	
400>	32	
gcagc	agca gacggcgcca cagttgagg	29
	- <del></del>	~-
-210		
:210>	33	
:211> :212>	19	
212>	DNA	
	Artificial sequence	
220>		
223>	Single strand DNA oligonucleotide	
400>	33	
ctgca	gagc tggaggtgc	10
	<del></del>	19
210-	24	
210>	34	
211> 212>	20 DATA	
	DNA Artificial demondo	

<220> <223>	Single strand DNA oligonucleotide	
<400> gacgaco	34 ctca cccattggtg	20
<211> <212>		
<220> <223>	Single strand DNA oligonucleotide	
<400> gaggage	35 etgt eggetgage	19
<210> <211> <212> <213>		·
<220> <223>	Single strand DNA oligonucleotide	
<400> taactta	36 aatc tggeteetga tetgeeg	27
<210> <211> <212> <213>	19	
	misc_feature Active portion of human Tal	
<400>	37	
Val Thi	r Pro Thr Ala Pro Gln Glu Pro Pro Glu Ser Val Arg Pro Ser 5 10 15	
Ala Pro	o Pro	
<210> <211> <212> <213>	38 . 700 DNA Homo sapiens	
<220> <221> <223>	misc_feature Active portion of human Tal	
<400> aaagagg	38 gaag teeetggaca cagagteaet eeaggagatg ateteggage agegetggge	60
cctcago	ctcc ctgctccagc agctgctcaa agagaagcag cagcgagagg aagagctccg	120
	cety acggagttag aagccaaaag tgaaaccagg caggaaaatt actggctgat	180
	ccaa cggcttttga accagaagee cttgtccttg aagctgcaag aagaggggat	240
	ccag ctggtggccc tcctggagga gctgtcggct gagcactacc tgcccatctt	300
tgcgcad	ccac cgcctctcac tggacctgct gagccaaatg agcccagggg acctggccaa	360
ggtggg	gte teagaagetg geetgeagea egagateete eggagagtee aggaaetget	420

	ggatgc	cagec aggatecage cagagetgaa accaecaatg ggtgaggteg tea	cccctac 480
	ggcccc	eccag gageeteetg agtetgtgag gecateeget eeccetgeag age	tggaggt 540
		cctca gagtgtgtcg tgtgcctgga acgggaggcc cagatgatct tcc	
		acgtc tgctgctgcc agcagtgctg ccagccactg cgcacctgcc cgc	
			.5-55
	ccagga	acatc geccagegee teegeateta ecaeageage	700
	<210> <211>		
	<212>	· · · —	
		Homo sapiens	
	<220>		
	<221>		
	<223>	Active portion of human Tal	
	<400>		
	gtcacc	cccta cggcccccca ggagcctcct gagtctgtga ggccatccgc tcc	ccctgca 60
	gagetg	ggagg tgcaggcctc agagtgtgtc gtgtgcctgg aacgggaggc cca	gatgatc 120
		caact gtggccacgt ctgctgctgc cagcagtgct gccagccact gcg	cacctge 180
	ccgctg	gtgcc gccaggacat cgcccagcgc ctccgcatct accacagcag c	231
	<210>	= -	
	<211> <212>	= <del>-</del>	
		Homo sapiens	
	1225	nono baptens	
	<220>		
	<221>		
	<223>	· <del>-</del> - · · · · · · · · · · · · · · · · · ·	
	<400>	40	
		cocta cggcccccca ggagcctcct gagtctgtga ggccatccgc tcc	cc 55
		33.3 3.3-00-503. 33-00.0030 666	33
	<210>	41	
	<211>		
	<212>		
	<213>	Artificial sequence	
	<220>		
	<223>	SiRNA synthetic oligonucleotide	
	<400>	41	
		agucu ucucucguct t	21
	<210>		
	<211>		•
	<212>	DNA Artificial sequence	
		•	
	<220>		
	<b>~443</b> >	SiRNA synthetic oligonucleotide	
	<400>		
	ctggag	gguca gaagagagca g	21
•			
	<210> <211>		
	<211>		
		Artificial sequence	
			•

### 19/20

<220> <223>	SiRNA synthetic oligonucleotide	
<400>	43	
	aggu uccggagact t	21
-		
<210>	44	
<211>		
<212>		
<213>	Artificial sequence	
<220>		
<223>	SiRNA synthetic oligonucleotide	
<400>	44	
	44	
cccagg	uuuc caaggecucu g	21
<210>	45	
<211>		
<212>		
	Artificial sequence	
10207	registrat seducace	
<220>		
<223>	SiRNA synthetic oligonucleotide	
	pluggere orrangement of the	
<400>	45	
	cacu ucccugcuut t	21.
		21.
<210>	46	
<211>	21	
<212>	DNA	
<213>	Artificial sequence	
	•	
<220>		
<223>	SiRNA synthetic oligonucleotide	
<400>	46	
ttagug	gagu gaagggacga a	21
	<b>.</b> _	
<210>		
<211>		
<212>		
<213>	Artificial sequence	
<220>		
	Cinna complete and a second	
<b>\4437</b>	SiRNA synthetic oligonucleotide	
<400>	47	
	ruga gagcuguaat t	
ug cugu.	Jaga gageagaaac c	21
<210>	48	
<211>		
<212>		
	Artificial sequence	
<220>		•
<223>	SiRNA synthetic oligonucleotide	
•		
<400>	48	
uuacago	cucu cagucagcat t	21
_	- -	
<210>		
<211>	21	
<212>		
<213>	Artificial sequence	
<220>		
<223>	SiRNA synthetic oligonucleotide	

25

### 20/20

<400> aauguc	49 gaga gucagucgut t	21
<210> <211> <212> <213>		
<220> <223>	SiRNA synthetic oligonucleotide	
<400> acgacu	50. gacu cucgacauut t	21
<210> <211> <212> <213>	23	
<220> <223>	PTAP-PSAP motif synthetic peptide GFP-fusion peptide	
<400>	51	
Glu Vai	l Val Thr Pro Thr Ala Pro Gln Glu Pro Pro Glu Ser Val Arg 5 10 15	
Pro Ser Ala Pro Pro Ala Glu 20		
<210><211><212><213>	28	٠
<220> <223>	Single strand DNA oligonucleotide	
<400> aagaat	52 tcag aggtcgtcac ccctacgg	28
<210> <211> <212> <213>	25	
<220> <223>	Single strand DNA oligonucleotide	
<400> aaggat	53 ccct ctgdaggggg agegg	25